N60478.AR.001428
NWS EARLE
5090.3a

TRANSMITTAL LETTER FOR THE MODIFIED PAGES TO SITE INVESTIGATION REPORT
NWS EARLE NJ
1/17/1995
ROY F. WESTON, INC.

Roy F. Weston, Inc.
1 Weston Way
West Chester, Pennsylvania 19380-1499
® 610-701-3000 • Fax 610-701-3186

17 January 1995

Northern Division Naval Facilities
Engineering Command
10 Industrial Highway
Mail Stop #82
Lester, PA 19113-2090

DCN: NWSE-0195-0121

Attention: Mr. John Mayhew

Re: Contract N62472-92-C-0415
Underground Storage Tank Removal (Gas Conversion)
WPNSTA Earle, Colts Neck, NJ 07722-5025

Subject: Modifications to the Site Investigation Report

Dear Mr. Mayhew:

Per your request, I have made the modifications to the Site Investigation Report. Please find enclosed the modified pages which are to be inserted into your copy. Another bound copy of the Site Investigation Report along with insert pages for the remaining three copies copies at Earle Naval Weapons Station have been forwarded to Tom Dunn.

Should you have any questions or concerns, please do not hesitate to contact me at (610) 701-3022.

Very truly yours,

Roy F. Weston, Inc.

Steven A. Rock
Principal Project Manager

Enclosures
cc: M.E. Lee
DCN File

P. V, 3-9, 4-3, 4-4, App E.

TABLE OF CONTENTS

CONTINUED

LIST OF APPENDICES

from 130 mg/kg to 1,400 mg/kg. Two soil samples were analyzed for VO + 10. Two target VO + 10 compounds were detected at a concentrations below their NJDEP Impact to Ground Water Soil Cleanup Criteria. The total volatile organic concentration for these samples were below the 1,000 mg/kg limit, while the total organic concentration in all samples was below the 10,000 mg/kg limit.

- Tank R-10 - Five post-excavation soil samples were collected and analyzed for TPHC. TPHC was not detected in any sample collected from the Tank R-10 excavation at reporting limits ranging from 59 mg/kg to 61 mg/kg.

- Tank R-15/1 - Seven post-excavation soil samples were collected and analyzed for TPHC. The results indicated the presence of TPHC at concentrations ranging from not detectable at 57 mg/kg to 8,400 mg/kg. Four soil samples were analyzed for VO + 10. One target VO + 10 compound was detected as a "J" value at a concentrations above its NJDEP Impact to Ground Water Soil Cleanup Criteria (methylene chloride, 1.6 mg/kg). The analytical laboratory attributes the detection of this compound to laboratory contaminants which were enhanced during the dilution process. For an explanation of this method detection results see Appendix E. The total volatile organic concentration in all samples analyzed for VO + 10 was below the 1,000 mg/kg limit, while the total organic concentration in all samples was below the 10,000 mg/kg limit.

- Tank R-15/2 - Eight post-excavation soil samples were collected and analyzed for TPHC. The results indicated the presence of TPHC at concentrations ranging from not detectable at 56 mg/kg to 20,000 mg/kg. Five soil samples were analyzed for VO + 10. Three target VO + 10 compounds were detected at concentrations ranging from 0.51J to 4.2J. Two samples had methylene chloride detected at a concentrations above its NJDEP Impact to Ground Water Soil Cleanup Criteria. The analytical laboratory attributes the detection of this compound to laboratory contaminants which were enhanced during the dilution process. For an explanation of this method detection results see Appendix E. The total volatile organic concentration in all samples analyzed for VO + 10 was below the 1,000 mg/kg limit. The total organic concentration in two samples exceeded the 10,000 mg/kg limit (10,110 mg/kg and 20,157 mg/kg).

- Tank R-22 - Four post-excavation soil samples were collected and analyzed for TPHC. The results indicated the presence of TPHC at concentrations ranging from not detectable at 54 mg/kg to 66 mg/kg. Since all concentrations were less than 1,000 mg/kg, VO + 10 analysis was not required on these samples. All concentrations of TPHC were below the 10,000 mg/kg limit for total organic compounds.

In summary. a product sheen was observed on the groundwater in the excavations for Tanks C-9 and C-31. In addition, the presence of methylene chloride above NJDEP Ground Water Soil Cleanup Criteria and excessively high TPHC concentrations were detected in the soils collected at Site R-15/1 and R-15/2.

4.2 RECOMMENDATIONS

Based on the findings of the site investigation, the following recommendations are made:

- Tank C-3/2 - No further action.
- Tank C-4 - No further action.
- Tank C-9 - Further investigation, including the installation and sampling of groundwater monitoring wells, be performed.
- Tank C-16 - No further action.
- Tank C-21 - No further action.
- Tank C-31 - Further investigation, including the installation and sampling of groundwater monitoring wells, be performed.
- Tank R-2 - No further action.
- Tank R-5 - No further action.
- Tank R-10 - No further action.
- Tank R-15/1 - Further investigation, including the installation and sampling of groundwater monitoring wells, be performed.
- Tank R-15/2 - Further investigation, including the installation and sampling of groundwater monitoring wells, be performed.
- Tank R-22 - No further action.

APPENDIX E

EXPLANATION OF METHOD DETECTION RESULTS

Laboratory Resources INC
Corporate Headquarters
100 Hollister Road
Teterboro, New Jersey 07608-1173
FAX: 201-288-5311
201-288-3700

December 29, 1994

Roy F.Weston Inc.
One Weston Way
West Chester, PA 19380

ATTN.: Mr. Bill Abraczinskas G1 N

Dear Mr. Abraczinskas,

This letter is in reference to your question on the low levels of methylene chloride reported in Laboratory Resources analytical report number T409092. It is common for laboratories to have low levels of methylene chloride in the air due to its required use during the extraction of samples for semivolatiles. This causes low levels of contamination during the analysis of samples for volatile organics. The contamination is usually at or near the methylene chloride detection level of 5 ppb.

In this specific case, samples R15-2-8, R15-1-2, and R15-FB showed low levels of this laboratory contamination. Please keep in mind that for samples which require dilution due to sample matrix problems, the low levels of ambient air methylene chloride would then be multiplied by the dilution required. Because of this, the result is artificially inflated accordingly. As an example. Sample R15-2-8 had a reported methylene chloride result of 4200 J. If methylene chloride was found at the detection limit of 5 ppb, the result would have been 5 ppb times the dilution of 1100 which equals 5700 ppb. Due to method requirements we are not permitted to subtract lab contamination from the sample results. However any result of methylene chloride found at or near the detection limit should be assumed as laboratory contamination.

I hope this answers your question satisfactorily. If you have additional questions please contact me at 201-288-3700.

Sincerely,

Daniel Glenn
Senior Project Manager
LRI New Jersey Division